

Contributors to this Issue

CHARLES D. BEACH, B.S. in E.E., 1959, University of Colorado; M.S. in E.E., 1961, New York University; Bell Telephone Laboratories 1959–1962. His work at the Laboratories involved theoretical analyses of interchannel modulation distortion in tropospheric scatter radio systems. He also participated in an experimental study of intermodulation performance of such systems. Since February, 1962, he has been on leave of absence from the Laboratories while teaching and pursuing doctoral studies at the University of Colorado. Member Tau Beta Pi, Eta Kappa Nu, Sigma Tau.

ROYER R. BLAIR, B.S. in E.E., 1930, Rose Polytechnic Inst.; M.A. in Physics, 1939, Columbia University; Bell Telephone Laboratories, 1930—. Mr. Blair's initial work at the Laboratories in transmission research led to the design of circuits for broadband amplifiers, regulators and test equipment for coaxial systems. During World War II he was concerned with circuits for proximity fuses, radar indicators and other security-classified devices. There followed a period in apparatus development on germanium and silicon varistors and on processing and test equipment used in that field. He later developed high-speed transistor switching circuitry for digital computer applications for the military. Since 1958, he has been investigating and studying the effects of nuclear radiation on various semiconductor devices and on their performance in a wide variety of applications. He is a senior member of the Institute of Radio Engineers and a member of Tau Beta Pi.

W. F. BODTMANN joined Bell Telephone Laboratories in 1941 and during 1942–1945 served in the U.S. Air Corps. After returning to the Laboratories in 1945, he worked on various circuits and components for the TD-2, TJ and TL radio relay systems, and on transistor circuits for wideband amplifiers. Later he was concerned with the FM feedback receivers for Project Echo, and more recently has been working on the frequency compression demodulators for Project Telstar.

W. L. BROWN, B.S., 1945, Duke University; A.M., 1947, Ph.D., 1951, Harvard University; Bell Telephone Laboratories 1950—. Mr. Brown

has been engaged in research on the physical properties of semiconductor surfaces and the nature of defects produced in semiconductors by high energy radiation. He has recently been responsible for radiation damage experiments aboard the Telstar satellite. Fellow of American Physical Society, Sigma Xi and Phi Beta Kappa.

JAMES C. COYNE, A.B., 1953, B.S., 1954, and M.S., 1958, Columbia University; Bell Telephone Laboratories, 1958—. Mr. Coyne participated in the planning for the Columbus Branch Laboratory and was engaged in development work on welded connections. At present he is engaged in reliability and application studies of solderless wrapped and percussive welded connections. Tau Beta Pi.

EUGENE I. GORDON, B.S., 1952, City College of New York; Ph.D., 1957, Massachusetts Institute of Technology; Bell Telephone Laboratories, 1957—. A member of the Electron Device Department, he is engaged in research in optical masers. Member American Physical Society, Phi Beta Kappa, Sigma Xi.

H. JAMES GRAFF, B.S.M.E., 1955, University of Notre Dame; Bell Telephone Laboratories 1956—. Mr. Graff has been concerned primarily with the development of a mechanical splicing method for polyethylene insulated conductor cable. At present he is in charge of a group responsible for the development of load coils, coil cases, and other outside plant items.

JESSIE MACWILLIAMS, B.A., 1939, M.A., 1941, Cambridge (England); Ph.D., 1962, Harvard; Bell Telephone Laboratories 1956—. Mrs. MacWilliams has been concerned with writing computer programs for the analysis and synthesis of transmission networks. She is now engaged in data systems studies, particularly the study of algorithms for decoding systematic error-correcting codes. Member Mathematical Association of America.

JOHN M. PEACOCK, B.S.E., 1947, Princeton University; Western Electric Co., 1947-50; Bell Telephone Laboratories 1953—. At Bell Laboratories Mr. Peacock first worked on the design of antennas, radio towers and other structures. Later he was engaged in fundamental development

work on expanded dielectrics for cable conductor insulation. At present he is supervisor in charge of outside plant wire joining and cable splicing activities. Member, American Wire Association.

D. STEWART PECK, B.S.E., 1939, M.S., 1940, University of Michigan; Bell Telephone Laboratories 1947—. Mr. Peck has been concerned in the design for production of gas-filled electron tubes such as rectifiers, thyatrons and cold-cathode tubes. More recently, he has been in charge of work on reliability studies, applications engineering, and specifications for electron devices. On Project Telstar Mr. Peck's department has been generally responsible for the specification, aging and selection programs for semiconductor components used in the satellite. Member A.I.E.E., American Standards Association, Tau Beta Pi, Eta Kappa Nu, Sigma Xi and Phi Kappa Phi.

ARNOLD PFAHNL, Dr. Phil., University of Graz, Austria, 1948, D.Sc., University of Paris, France, 1956; G. Massiot & Cie. and Massiot-Fluor, Courbevoie, France, 1950-57, Bell Telephone Laboratories, 1957—. At the Laboratories, Mr. Pfahnl has worked on the study of the properties of fast-decay cathode-ray tube phosphors, the development of ZnO phosphors with application to cathode-ray tubes used in electronic switching, and the study of injection electroluminescence of gallium phosphide.

J. DANE RIGDEN, B.Sc., 1955, and Ph.D., 1958, Reading University, Reading, England; National Research Council of Canada, 1958-60; Bell Telephone Laboratories 1960—. Mr. Rigden has specialized in the development of gaseous optical masers and is the co-developer of the visible helium-neon maser.

C. L. RUTHROFF, B.S., in E.E., 1950, and M.A., 1952, University of Nebraska; Long Lines, 1946-52; Bell Telephone Laboratories, 1952—. Since transferring from Long Lines in Lincoln, Nebraska, where he was a central office maintenance man, Mr. Ruthroff has concentrated on radio research with emphasis on FM problems and transistor circuits for microwave components and systems. Member, I.R.E.

FRIEDOLF M. SMITS, Dipl. Phys., 1950, Dr. rer. nat., 1950, University of Freiburg, Germany; research associate, Physikalisches Institut, Uni-

versity of Freiburg, 1950-54; Bell Telephone Laboratories, 1954-62. Mr. Smits went to the Sandia Corporation in May 1962. His work at Bell Telephone Laboratories included studies of solid-state diffusion in germanium and silicon, device feasibility, and process studies, as well as the development of UHF semiconductor devices. He supervised a group that conducted radiation damage studies on components, particularly solar cells, used in the Telstar experimental satellite. Member of the American Physical Society and the German Physical Society.

JOSEPH M. TRECKER, B.S. in E.E., 1949, Iowa State College; Bell Telephone Laboratories, 1949—. His early assignments involved studies of information requirements and planning of communication systems for military applications. More recently, he was engaged in studies of transmission characteristics of tropospheric scatter radio systems. He is now in charge of a group studying information flow and ground communication network arrangements for the Apollo space mission. Member Tau Beta Pi, Eta Kappa Nu.

J. JOHN ZALMANS, B.S.M.E., 1953, University of Arizona; Bell Telephone Laboratories, 1953—. Mr. Zalmans is engaged in the development of connecting devices. American Society of Mechanical Engineers, Tau Beta Pi, Pi Mu Epsilon.